# M.A.T.



# MUSIC, ART, THEATRE

Issued by the University of Alberta
Departments of Fine Arts and Extension

### EDITORIAL

Another issue of Mat serves to acquaint our readers with recent productions and preparations of Alberta's art followers.

Congratulations to Professor Richard Eaton and his Mixed Chorus on their ninth annual concert which opened the month's productions. The glorious and majestic tones of an Eaton choir are almost taken for granted round the campus. Gordon Kay Greene, President of the Executive, and all his staff, worked hard and effectively and deserve our appreciation.

Just as we go to press word has come through that the Studio Theatre entry "Othello" took the honours at the Alberta Regional Festival at Lethbridge. In addition, best actress and best actor awards were won by Rosemary Hood and Robert Orchard. A factual account appears elsewhere. We hope to have a critique available for the next number of MAT. Meanwhile, congratulations again!

We are indebted to Mrs. E. Taylor for her report on the Edmonton Symphony. Her analysis of the performance is searching and constructive.

# HANDICRAFTS IN THE PEACE COUNTRY

Mr. and Mrs. Martin Joyce of the Banff School of Fine Arts contributed a great deal to the development of the Peace River Project in their successful organization of Handicraft groups in that area.

Prior to the Christmas season they attracted 78 interested people to a six-weeks class at Beaverlodge, where they taught Ceramics, Leathercraft and Woodwork. The results of this course were sent to Edmonton for display and are now being displayed in Peace River.

Approximately 25 people attended the class at Peace River. Miss Margaret Tewnion instructed the group in silk-screen printing and jewellery making, and some very good work was turned out. The special versatility of the silk-screen process found great favor. Textile painting was also undertaken. A class in weaving is now being conducted by Mrs. Holt of Peace River.



### A REPORT ON THE EDMONTON SYMPHONY

On Sunday, February 22, the Edmonton Symphony Orchestra gave a performance under the conductorship of Lee Hepner. I shall review this performance, not from the point of view of the professional musician or the professional critic, but from the point of view of the music lover.

The more I study the "language" of music—form, style, construction, etc., etc.—the more I realize that the "language" is completely unnecessary for the love of music as well as for its comprehension. The real language of music is contained in the music itself; the so-called "language" referred to above is actually only the mechanics. It is interesting to understand these things. It is interesting to follow the development of music up through the Baroque period, the Classical period, the Romantic period, the Modern period—but all this knowledge has nothing whatever to do with one's love and appreciation of music.

So I shall speak of this performance as a mere lover of music,

omitting all musical terms and expressions.

The program opened with a performance of the Mozart Symphony in G Minor. I found this a most satisfying performance in every way. It was controlled and disciplined, it also sparkled and sang as Mozart should. To watch Lee Hepner's conducting is to me a wonderful experience. He seems literally to draw out of the orchestra the exact shade, the exact subtlety of tone that he wants and he does this with no display of histrionics, but with the quiet sureness of complete understanding of the music being performed.

The second number was Wagner's "Siegfried Idyl". I breathed a prayer before this selection began! To perform Wagner with less than the ultimate in perfection is to me a desecration. For me the "great composers" are Wagner, Beethoven and Mozart—in that order, and I can accept nothing less than absolute perfection in the performance of their work. This performance of the Siegfried Idyl wasn't perfection—but it was acceptable. This work is typically Wagnerian, but it is not Wagner at his greatest. It is charming, emotional and very beautiful. The performance was not an inspired one, but it was well done and most enjoyable.

We now come to the major item on the program, the Rachmaninoff Concerto in C Minor, the second. I love this work. It has, and always will have, a special place in my heart. I have

loved it for years and familiarity with it never breeds contempt. First let me say that I was amazed at the performance of Patricia Rolston in this work. She gave an excellent performance. Also, there were moments when the orchestra itself was very satisfying, but the performance as a whole, left me wishing that they had done a less demanding concerto, or rather a concerto whose demands were different.

In this concerto we have, on recordings, a performance which is definitive. Its composer was a man of triple genius. He was a great composer, one of the greatest pianists the world has known and a top ranking conductor. This concerto was composed in the light of this triple genius. It is never a mere show-piece for the virtuoso pianist. One feels that it is a symphony for orchestra and piano. It is an integrated whole and must be performed as such. Rachmaninoff's recorded performance of this work shows us what was intended and how it should be performed.

Orchestrally it seems that it must be a very difficult work because it can so easily fall apart, disintegrate, and lose its meaning. And when this happens it always falls apart in exactly the same places. The rhythm is lost, and the moment the rhythm is lost so is the melodic line and we flounder around in meaningless and unrelated sounds. In all these difficult spots this happened in this particular performance. Both Mr. Hepner and Miss Rolston fought to carry the orchestra through, but the orchestra just didn't have it. Their inspiration was not sufficient to compensate for the lack of it in the individual members of the orchestra.

Personally, I should like to hear this work attempted again in three or four years when the orchestra becomes more mature and more integrated. Perhaps by then, too, we will have some place where they can perform and the acoustics make it possible to hear properly. The acoustics in the Capitol Theatre are very poor indeed.

EDITH A. TAYLOR.

# **BLOSSOM TIME COMING TO EDMONTON**

Nostalgic memories come to one's mind in recollecting early performances of Blossom Time, in the city, an even thirty years ago. The Edmonton Civic Opera Society, which presents this light opera at the Strand Theatre on March 18, 19, 20, 21, has secured the services of the Vancouver artist, Karl Norman, for the principal role of Franz Shubert.

Mrs. J. B. Carmichael, Musical Director of the Company, will have a strong cast as follows: Ray Phipps as Baron Schober; Peter Dezman, Vogle; Ruth Gillis New, Mitzi; Crystal MacDonald, Kitzi; Rose Novakowski, Fritzi; Gabrielle Guy, Bellabruna; Joe Macko, Binder; Armand Baril, Erckman; James Thomson, Kupelweiser; Don O'Neill, von Schwindt; Lucie Dombroski, Greta; Kay Hanak, flower girl; Robert Eby, Mr. Kranz; Jacquie Battersby, Mrs. Kranz; Paul Hervieux, Count Scharntoff; Margaret Foster, Mrs. Coburg; Phillip Baker, Novotny; Betty Muter, Rosi; and Robert Shaw, waiter.

# MAYTIME IN ALBERTA

Initiating a new promotional technique with "Maytime in Alberta", 1952 saw a four-day cultural festival, devoted to music, art, drama, handicraft and libraries toured through the Peace River area. Approximately 150 persons visited ten communities in the Peace River presenting 34 engagements with an estimated 15,000 residents of the area being effected either directly or indirectly by the tour.

At this point, mention should be made of the co-operation of the Royal Canadian Air Force Band under the direction of Flying-Officer Corcoran, which appeared as part of the Maytime Festival with the kind permission of Air Commodore J. G. Kerr, CBE, CD, AOC Tactical Air Group, Edmonton. Flying-Officer Corcoran the conductor, proved to be an unexpectedly successful feature of the festival in his own person, for in addition to leading one of the finest bands on the continent, he took the trouble to explain the value of music and the place of the band in such a way that he stimulated plans to organize several bands in the area.

The University Mixed Chorus and the Studio Theatre were both extremely well received in the area and did a great deal through the personality of the individuals comprising the bodies to convince some of the residents of the values of a cultural program in the community.

Since Maytime, community programs have been developed in five areas where none had hitherto existed, while the local programs carried on in the other three were much stimulated.

Following the route established by the Maytime tour, two representatives of the National Gallery toured the Peace River. They were Miss Frances Loring, one of Canada's most distinguished sculptors, and Dr. A. Y. Jackson, a member of the "Group of Seven", the painting school which established a distinctively Canadian approach to painting, toured the Peace River. The tour was sponsored by the Extension Department and the Fine Arts Department of the University, jointly with the Cultural Activities Branch. Their visit occasioned a great deal of interest in the Peace River, and did a great deal to stimulate an interest in Visual Arts.

After this performance, the tour of the "Alberta Trio", under the sponsorship of the Alberta Music Board, added to the developing program in the Peace River.

### ALBERTA TRIO

The trio which appeared in the Peace River during the period November 24 to December 2, is an outstanding musical group. All the performers are young, but in spite of their age have distinguished themselves in various ways in the musical world, and can be expected to be heard from further.

Miss Sandra Munn, the pianist of the group, is a pupil of the distinguished Calgary musician, Mrs. Gladys Egbert, and is an out-

standing performer in her own right. She has already begun to teach in Calgary, but is hoping to establish herself as one of the

young concert pianists in the southern city.

Miss Marion Paulence is a violin student of Clayton Hare, the conductor of the Calgary Symphony Orchestra, and who is an outstanding virtuoso performer himself. Miss Paulence brings to the violin an understanding of the instrument and its possibilities that is rivalled by few young performers.

Miss Arlene Meadows, whose voice is known through radio and concert appearances in Southern Alberta to many Albertans

already, is a pupil of Mrs. Elgar Higgins.

The list of prizes and awards taken by these three young artists at festivals and competitions is imposing. They have appeared in recitals at Banff School of Fine Arts and through the offices of the Western Board of Music, and have been recognized as some of Alberta's finest young talents.



### LACOMBE ART CLUB

Organized for its fifth consecutive year

The Lacombe Art Club was first organized in the Fall of 1948 by Professor H. G. Glyde, Head of Department of Fine Arts, University of Alberta. Its first officers were Mrs. Mary C. Lawrence as President and Mrs. Margarite Lodmel as Secretary-Treasurer. Mrs. Gwytha Evans, now of New York, U.S.A., was its first instructor and conducted the classes for the first three years. For the last two years the Club has been very fortunate in procuring the services of Mr. J. B. Taylor as instructor. Mr. Taylor is a noted modern artist who is at present also instructing classes at the University and at Lethbridge and Medicine Hat.

Under these two artists the Lacombe Art Club has worked enthusiastically for almost five years. The class feels that its work has not been in vain, as several of its members have won a degree of distinction—Dr. Dean Locke, a retired physician, who has painted for only two and a half years, had one of his fine watercolors "Shadow on the Snow" chosen from a large collection of paintings, works of fellow doctors, to be reproduced for Christmas cards. Mrs. Mabel Atsinger, a farmer's wife, who has been a member of the club since its organization, won a scholarship for

attendance at the Banff School of Fine Arts. Mrs. Mary C. Lawrence, President of the club, also had one of her oils purchased by the C.P.R. for its collection to be reproduced for use in their hotels and offices.

These classes are conducted in the modern style, that of learning from criticism rather than by actual teaching. Mr. Taylor, the instructor, demonstrates in oils and in water colors, different types of paintings, such as portraits, landscapes and still life groups, then he assigns certain works to be done for the following class.

The demonstrations are a great help to both beginners and those more experienced, but of equal help are the criticisms which each student receives of his work. He not only derives benefit from the criticism of his own paintings but on that of his fellow-students' work. In his criticism, Mr. Taylor is very considerate of of his pupils' feelings, yet in an unmistakeable manner the would-be artist is led to see his errors and those of his fellow-classmates.

At the close of the season the club holds an exhibition of the best of their paintings. Tea is served and the silver collection thus obtained helps defray expenses of films and exhibitions of noted artists enjoyed by the club during the following season.

The members of the club are all agreed that they cannot conceive of any more enjoyable and satisfying hobby than that of painting.

MARY C. LAWRENCE.

# SPRING ART COURSE AT DAWSON CREEK

Informative talks by Professor J. B. Taylor and colorful films launched our ten-day Art Course. Through courtesy of the Principal and School Board each evening found us in the Art Room of South Peace River School watching demonstrations, listening to principles of composition, line, color or endeavouring to produce masterpieces. A portrait demonstration with the class venturing to follow the instruction produced surprising likenesses, considerable mirth and a few ridiculous cartoons. On warm afternoons small groups sketched, with Professor Taylor attempting to teach us to capture the magnificent ecstasy of spring bursting instead of painting in each little leaf as it popped.

The enthusiasm engendered by our courses carried some members into further fields of endeavour. The abstract enthusiast enrolled in Art School last fall and finds his anticipations abundantly fulfilled. One of the most faithful and enthusiastic members of our group spent her holiday at Banff attending Fine Arts School, and besides bringing back a number of fascinating sketches, has passed on some valuable instruction. A local guide and writer on wild life sold a business firm his largest mural, and our secretary is under contract to the new hotel to paint a dozen local scenes. Attractive sketches by our water color worker evoke admiring comments. The great grandmother who commenced painting at the age of eighty keeps us alert with her delightful canvasses,

while the two young lads whisk off a scene or fantasy with the sponeaneous ease we seniors often envy.

Plans are progressing for this spring's cours. Our group owes much to the Departments of Extension and Fine Arts for sending such invaluable instruction in the appreciation and pursuit of our pastime. Professor Taylor's happy faculty of making learning a delight provides insight, inspiration and interest for another year of fun at our easels.

(Mrs.) BETTY MUNDY, Dawson Creek, B.C.



### ALBERTA REGIONAL FESTIVAL

The 18th Regional Drama Festival was held in Lethbridge on February 19th, 20th and 21st. It was exactly twenty years since the first Regional Festival, which was also held in Lethbridge, and it was a tremendously successful anniversary.

An appreciative audience of over 3,000 attended over the three days. The plays were: "Night Must Fall" by Emlyn Williams, presented by the Playgoes of Lethbridge, directed by Hugh Buchanar; "Othello" by William Shakespeare, presented by Studio Theatre of Edmonton, directed by Elizabeth Sterling Haynes; "The Emperor Jones" by Eugene O'Neill, presented by the Civil Service Playhouse of Edmonton, directed by Marjorie Buckley.

Mr. John Allen, of London, England, was the Regional Adjudicator. On Saturday night the awards were made:

Best Play: "Othello", presented by Studio Theatre.

Best Actress: Rosemary Hood in the role of "Desdemona" (Othello).

Best Actor: Robert Orchard in the role of "lago" (Othello).

Best Supporting Actress: Mary Waters in the role of "Mrs. Terence" (Night Must Fall).

Best Supporting Actor: (Not awarded).

Honorable mention was given to Allen Hood in the role of "Othello", and to Bill Fruet in the role of "Danny" (Night Must Fall).

The entire Festival Committee in Lethbridge under the chairmanship of Harry Baalim is to be congratulated for bringing in huge audiences from the entire southern section of the Province. The warm hospitality extended to the casts of the visiting plays by the various business firms in Lethbridge and by their host, the playgoers, will be long remembered. In addition, the tireless efforts of Mrs. E. Christensen, President of the Alberta Drama League, contributed immeasurably to the success.

Thank you, Lethbridge!

### **GREEN ROOM GOSSIP**

On February 4, 5, 6, Fort St. John, B.C., held its eighth annual Drama Festival. Seven plays were entered in Class 1 (Grades 1 to 8); three in Class 2(Grades 9 to 12); and five in Class 3 (Adult). Of these 15 one-act plays, four were productions of plays which had been written locally during the past year. In the junior section several of the plays were adaptations of stories and poems, one of which was "The Golden Pine Cone", an Indian legend.

Mrs. Vernice McIvor started this burst of creative activity in this area when she presented a production of her own play, "Peace River Legacy", two years ago. Last year three new plays were done, and this year, four. These new playwrights are all en-

thusiastic and eager to go on writing.

Perhaps as our Provincial One-Act Festival grows, we can look forward to a similar development of new playwrights in Alberta.

In Jasper last January a group of fourteen people waded through the drifts to hear your Extension Drama Specialist talk about drama work being done in the Province. The result? They're already working on three one-act plays: "The Jack and the Joker", "The Case of the Crushed Petunias", "The Monkey's Paw".

The Coaldale Little Theatre has sent in the program (very attractive, by the way) for their production of "Blithe Spirit" on February 4th and 6th. We note that there were at least 25 people involved in this production. Murray Robison writes that Mrs. Elodia Christensen, President, Alberta Drama League, attended one performance and that members of the Playgoers of Lethbridge attended on both evenings.

Here are some more of the entries in the Provincial One-Act Festival:

**Innisfail (rural):** "Anything Can Happen", directed by Mrs. Louise Scott.

**Lethbridge M.I.A.:** An adaptation of "Dr. Faustus", directed by Dr. B. Wayne Matkin.

Playgoers of Lethbridge: "The Twelve Pound Look".

Wetaskiwin Theatre Guild: "The Valiant", directed by William Rourke.

Coaldale Little Theatre: "The Case of the Crushed Petunias", directed by Murray Robison.

**Coaldale High School:** "The Romancers", directed by Murray Robison.

Canadian Women's Theatre Guild, Edmonton Branch, sponsored "Othello" and "The Emperor Jones" in Edmonton at the Composite High School Auditorium on February 16th and 17th, for the purpose of sending the two plays to Lethbridge for the Alberta Regional Festival and to provide a drama fellowship for an Alberta student.

Interesting recent additions to the University Extension Library include:

"Japanese Theatre" (full historical account for westerners) by Faubion Bowers.

"Here's a How-De-Do" (My life in Gilbert and Sullivan) by Martyn Green.

"Modern English Drama" (A survey of the theatre from 1900) by Ernest Reynolds.

"From the Modern Repertoire: Series I" edited by Eric Bentley.

"Mrs. McThing" by Mary Chase.

"Best Plays of 1951-52" edited by John Chapman.

"Masque of Aesop" by Robertson Davies.

"Best American Plays 1945-51" edited by John Gassner.

"Best One-Act Plays of 1950-51" compiled by J. W. Marriott.

The Wetaskiwin Theatre Guild is sponsoring a weekly series of Extension classes in acting during February, March, April, and May. In addition, the group has three one-act plays slated for

March.

The Wetaskiwin High School is hard at work on their spring production, "The Man Who Came to Dinner", under the direction of Mrs. Shirley White.

The Lamont Y.P.U. is planning to enter the Edmonton Y.P.U. one-act festival in March with a Canadian play, "The First McDougall Church". Director of the play is Mrs. Ernest Nix.

Mr. Peter G. Harris of the Beaverlodge Community Players informs us that on February 12th their group presented three one-act plays: "The Family Group" by Mabel Constanduros; "Barbara's Wedding" by Sir James Barrie; "Ada Gives First Aid" by Eunice Merrifield.

In Fairview the High School Drama Class, under the supervision of Mr. Stan Chapman, presented two one-act plays and a puppet show: "The Man Who Married a Dumb Wife" by Anatole France; "The Old Lady Shows Her Medals" by J. M. Barrie; the puppet show was based on "The Infanta's Birthday Party".

# HOW TO BUILD YOUR OWN LIGHTING EQUIPMENT

by A. J. H. Pullinger

(Production Manager and Technician, Studio Theatre)

Most amateur play producing groups are aware of the increasing importance of stage lighting design—aware of the valuable contribution it can make to the overall success of the play. Therefore, I will waste no time in belaboring an accepted point of view. However, the method of achieving good stage lighting in terms of lighting equipment is more often than not a point of concern, worry, and often of frustration. You cannot build a house without proper equipment. For most groups professional lighting equipment is economically out of the question. The problem then becomes one of building the required equipment, or of adapting other types of lighting equipment to stage use.

Before starting to build any home-made lights, the amateur must avail himself of the advice, if not the services, of an electrician. Very serious accidents can happen through a lack of knowledge of the basic principles of electricity—particulary from overloading circuits. Perhaps the electrician will not know why a spot or flood is being constructed in such a way or why it is being used in a particular place, but he certainly can spot bad wiring practise, or the overloading of a circuit. Remember, the mistakes are **not** made by electricity, but by the people working with it.

# Consult an electrician!

There are certain types of lamps that can be used alone or can be built into a spotlight or floodlight form. These lamps are the Par-38's and the R-0's. Both of these come in two models, Spot and Flood. They vary in light output, wattage, and in price. The best way to obtain a comparison of their separate charcteristics is to put the information in a table form. From this table you can

Lamp	Watts	Rated Life	Beam Candlepower	Beam Spread	Cost
PAR-38 (Spot)	150	1,000 hrs.	12,000	15°	\$2.15
PAR-38 (Flood)	150	1,000 "	3,500	30°	2.15
R-40 (Spot)	150	1,000 "	7,000	15°	1.45
R-40 (Flood)	150	1,000 "	1,400	30°	1.45
R-40 (Spot)	300	1,000 "	16,000	15°	2.15
R-40 (Flood)	300	1,000 "	2,800	30°	2.15

see that certain of the lamps give more Candle Power than others, and cost more! The 300 watt R-40 Spot gives more light than does the 150 watt PAR-38. In the Flood type, however, the 150 watt PAR-38 gives more light than does the 300 watt R-40. When using these reflector lamps alone, then, the best combination would be to use the 300 watt R-40 Spot for substitute spotlights, and the 150 watt PAR-38 Flood for floodlighting purposes.

If the lighting calls for a source close to the set, such as sunlight or moonlight coming through a window, then the less expensive R-40 Floods would be adequate. When using the "Spot" type of

lamp one point should be kept in mind. The angle of beam spread for this type is only about 15 degrees. Therefore do not hang the "Spots" close to the stage and expect them to cover a large area. Conversely if hung too far from the stage the light is dissipated over a large area, and the intensity, or amount, of the light on the stage will be greatly reduced. The optimum point for each specific stage must be discovered by experimentation on that particular stage.

In conjunction with these lamps a universal-joint type of socket is needed. This enables the lamp to be turned in almost any direction. The type used at the Studio Theatre is the "Angle Adapter" No. 4363 made by the Hart and Hegman Electric Co. These can be supplied by most large hardware or electric supply firms. With the universal joint sockets just described all that is needed to "mount" the lights is an ordinary socket at the required place. If a series of outlets are not available where needed, then a number of porcelain sockets can be mounted on a length of 1" x 6" board hung in front of the stage for lighting the front areas, and another such length hung behind the proscenium, to light the back area of the stage. An improved method would be to run proper wiring conduit, or "BX" cable along the board between each socket. Each socket should have its own line, i.e. all the lamps are not wired together in series or in parallel, but individually. necessary such a "spotlight board" could be put up and taken down if it cannot become a permanent fixture.

# The Spot Board

To answer the questions that automatically arise next:—(a) the length of the "Spot board" should be equivalent in length to the width of the stage opening; (b) there should be a minimum of four outlets or sockets, increasing by twos up to eight as a probable maximum; (c) one "Spot board" should be mounted in front of the stage at a point where an imaginary line drawn from about four or five feet back from the front edge of the stage, and at about a 45 degree angle, strikes the auditorium ceiling. The second 'Spot board" should be hung behind the proscenium opening where it will not interfere with the curtain, and where the light can shine uninterrupted on the rear areas of the stage; (d) the sockets should be spaced on the board so that there is one at each end and one eight or ten inches each side of the centre of the board. When doubling the number of sockets the initial positions should be maintained but the sockets should not be mounted so close together that in turning the lamps they interfere with each other. using the double sockets in those positions the amount of light on each side area is, naturally, doubled. As both lights cover about the same area, then the two sockets, in each position, can be wired together in parallel. This is a saving in the amount of wire and plugs needed.

The PAR-38's and R-40's with the "Angle Adapter" sockets can also be mounted on short pieces of board, and hence can be

used in different positions about the stage. The sunshine coming through a window mentioned previously can easily be achieved by mounting three or four sockets on a short length of board, using R-40's, and hanging the board in a vertical position a few feet off stage from the window. From this suggestion it can be seen that single or multiple socket mountings of these reflector type lamps, with the "Angle Adapter" can be used in a number of special places on stage in conjunction with the set design, as well as for general lighting from the front. One point that should be mentioned here is that only short lengths of wire (with attached plua) should come from the sockets on the short boards. About two feet is enough. The reason for this is that it makes such pieces of equipment easier to work with-no trailing wire to fall over, and easier to store. To connect between the spot boards and the wall outlet, longer pieces of varying lengths and proper plugs should be prepared. You do not always know how long a piece will be needed, and it is a nuisance to have to coil up 8 to 10 extra feet of wire when a five foot piece would have reached from board to outlet.

Adaptation of lighting equipment originally designed for other purposes is a further source of supply for stage lights. Store window display equipment can often be converted to stage use. There are several different types of holders for the previously mentioned reflector type lamps. Most of these holders allow for color modification of the light. In the matter of choice of such equipment to fit his particular needs, the amateur should consult the catalogues of the suppliers of this equipment. While this type of lighting equipment is more flexible and perhaps easier to handle than some homemade equipment, it is generally somewhat expensive.

A further source of "adaptable" equipment is that used in photography. Here the tendency is toward floodlighting. However a good range of such pieces is available in varying areas of coverage, intensities of light, and in price. Often the floods come equipped with collapsible stands, or clamps that allow for hanging from pipes, beams, etc. If the high intensity lamps that come with such equipment are used, it shold be remembered that their rated life is usually about six hours. Therefore an adequate supply of spares should be kept on hand. In the interests of economy, for rehearsals ordinary 100 watt or 60 watt household lamps should be substituted for the shorter life and more expensive photoflood lamps used in this equipment.

The actual building of lighting equipment is somewhat complex, and calls for the expenditure of a little more money. However, the advantages to be gained are considerable. More control can be exerted over the light in terms of direction, angle of beam spread, intensity and color modification.

# Stage Spotlights

Tin cans form the basis for the more simply constructed spots and floods. A good sized tin is needed. One that fits this stand-

ard is the curcular tin containing anti-freeze solution. A tin of this size can use either the ordinary household type of lamp or the reflector type lamps mentioned previously. After cutting the lid off, making sure that there are no jagged edges, clean the inside thoroughly so that no trace of the anti-freeze solution is left. On the bottom of the tin, and in the exact centre, place a porcelain socket. Mark the positions on the tin of the two screw or bolt holes on the socket. Punch or drill these holes. Place the socket back in position and one inch below the edge of the socket mark the position for another hole. This hole should be punched out or drilled larger in diameter. Particular care should be taken to insure smoothness of the edges. This is the hole through which go the lead-in wires to the socket. This is the reason for the larger hole, and the smooth edges to prevent wearing the wire. Before bolting the socket down, a thin plate of heatresistant insulating material, trimmed to the same shape as the base of the socket, should go between the socket and the bottom of the tin. The wire used should be white asbestos-covered, No. 14 gauge. It need be only 1 or 2 feet long, with a heavy rubber male plug on the end.

The yoke, by which the spot is hung, and which provides a means of turning in the desired direction, is made of 1/4" to 1/2" strap iron. It is bent in the shape of a flat, square "U". In the center of each side of the can bore a hole to make a small bolt. A hole of equal size is bored in the end of each arm of the strap iron "U". The length of the yoke should be such that when pivoting from the holes, the tin can turn completely around inside the yoke. In the center of the flat part of the "U" yoke, bore another hole the same size as the other two. Now attach the yoke to the tin can by means of short bolts, lock washers and wing or butterfly nuts on the outside. This allows the spot to be clamped at any angle.

The next task is to make the clamp by which the entire spot can be clamped wherever it is needed. This is made of 1/8" x 1" hot rolled band iron. It is made in the form of a "V" that lies on its side. It should be 5 inches long. The narrow end of the "V" should not close completely, but should be about ½ inch apart, then spread out to make almost a full circle. This gives spring and tension to the arms of the "V". The opposite ends of the arms. at the wide part of the "V", should be far enough apart so that it can clamp over the widest pipe that the spot will hang from, usually about 2 inches. Next turn each end of this wide part in one half inch, toward each other, and cut a small "V" shaped notch out of each. This tooth arrangement allows the clamp to be fastened to wooden beams-2" x 4" etc. By making the clamp this way it can be clamped to various sized pipes for one show, and if necessary, to various sized beams or boards in another position for another show. Next bore two holes, opposite each other, through the top and bottom arms of the "V",  $2^3/4$ " back from the wide end. Run a long bolt through this, head on the bottom, and a wing nut on the top. This provides the mechanism to close or open the clamp. Now bore one more hole through the bottom arm 4 inches back from the open end. A short bolt and wing nut attaches this to the yoke of the spotlight—through the hole previously bored in the center of the flat part of the yoke.

To each side and to the bottom of the front of the spotlight attach, by bolting or soldering, an "L" shaped piece of metal. The short arm of the "L" faces in toward the centre of the spot. The long arm of the "L" should be 13/4" and the short part about 3/4". These three pieces hold the color frame in place.

The color frame is a simple device for holding the colored gelatin that gives the required color to the beam of light. Take a piece of 24 or 26 gauge tin twice the length of the diameter of the spotlight and equal in width to the diameter, adding one inch to each dimension; e.g., to length and width. Fold it exactly in half. Now cut a hole through both pieces ½" less than the diameter of the spot. At each corner of the open end bore a small hole about ½" in diameter. The sheet of colored gelatin, cut to size, is dropped in between the two halves of the frame, and through the small holes are placed Roundhead Brass paper fasteners (No. 33 "Noestring"). This holds the gelatins firmly in the color frame.

A further refinement that can be added to the spotlight is a louver. This is merely a series of concentric rings mounted in front of the spot. The purpose of this is to control the spill light from the lamp—that is, it causes the rays to travel out in a more or less parellel beam rather than fanning out. A louver can also be an economy factor. If only PAR-38 or R-40 floods are purchased, then the tin can spot acts as a floodlight, and then by inserting the louver, it becomes a spotlight with a beam approximating the diameter of the tin can. Hence by the purchase of only one type of lamp, and using a louver, it is possible to have flood and spot. Even used in conjunction with the spot type of lamp, a great deal of spill light is avoided.

Here again the construction is not too complicated. While louvers for professional equipment are designed according to a mathematical formula, resulting in a geometric progression of spacing, materials easily found around the home may be substituted. Required are a series of about four tin cans starting in size from the type baby food comes in, or smaller, up to one that would come one or two inches from the side of the spot itself. Cut a ring from each of these cans 13/4" in width. Three lines of strips of tin 120 degrees apart are soldered to the rings to hold them together, one inside the other, to form a series of concentric rings. Every surface of this louver must now be painted with a flat mattblack paint—heat resistant if at all possible. The paint definitely must be non-reflecting. As the inside of the tin can spot forms the final ring of the louver, it too should receive a strip of the paint, equal in width to the of the louver.

Fastening the louver into the front of the spot should be done with two bolts through holes opposite each other in the outer ring. The bolts must be long enough to reach from this outer louver ring to the side of the spot. One nut will clamp the bolt to the louver. Cut slots in the sides of the spot to receive the two bolts. The slots must be deep enough so that when the bolts are slid to the back, the louver is flush with the front edge of the spot. It is better to use slots, rather than holes, as this makes it easier to slide the louver in and out when changing lamps. Two nuts are placed on the end of the bolt so that one comes each side of the edge of the tin can spot, and thereby clamps the louver in place.